

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 7,197,898 B2
APPLICATION NO. : 09/989799
DATED : April 3, 2007
INVENTOR(S) : Sheng-Guo Wang

Page 1 of 2

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

1. Column 1, after line 22 and before line 23, should insert the following paragraphs:

BACKGROUND OF THE INVENTION

1. Field of the Invention

The present invention relates to optical fibers and a process for optical fiber drawing.

2. Description of the Related Art

Optical fiber drawing process is an important period of optical fiber manufacturing.

A conventional drawing process of optical fiber is as follows. A completed preform is fed slowly into a furnace where the preform end is heated to about 2000°C and soften. The soften glass forms a globule falling down from the furnace, through the other stages of the drawing process and onto a take-up spool. The stages thereof are outer diameter measurement, fiber cooling stage, fiber coating stage, coating concentricity measurement, curing stage, coating diameter measurement, fiber drawing capstans, proof test and winding on take-up spool. The feeding speed depends on the furnace design, preform diameter and draw speed. The optical fiber which has just left the furnace and is remaining intact is called "bare fiber". Usually, the required fiber diameter is controlled by varying the fiber draw speed while keeping furnace temperature and preform feeding speed constant. This is accomplished by monitoring the fiber diameter immediately as it comes out of the furnace by using one of several types of non-contacting methods, such as laser light scattering (James J. Refi, Fiber optic Cable – A Light Guide). Then, the controller uses this output signal of diameter measurement to automatically adjust the speed of the drawing capstans to obtain the correct output diameter.

The fiber cools down after leaving the diameter monitor. There may be a cooling device or just a natural cooling stage. Then, it has a protective plastic coating applied in order to preserve strength, to isolate itself from external force and to avoid microbending losses. There are two coating stages: one inner soft primary coating and another outer hard secondary coating. After coating applicator, a monitor measures concentricity which is another important specification. Then, the fiber passes a curing furnace/lamp. After coating and curing stages, a second diameter monitor is used to measure coated fiber diameter, i.e., to provide coating diameter measurement.

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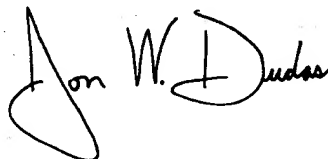
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It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

2. Column 3, line 54, "U.S. Pat. Nos. 5,333,610" should read --U.S. Pat. Nos. 5,443,610--.

Signed and Sealed this

Twenty-ninth Day of May, 2007

A handwritten signature in black ink, appearing to read "Jon W. Dudas". The signature is stylized with a large, looping initial "J" and a distinct "D".

JON W. DUDAS
Director of the United States Patent and Trademark Office